

FIG. 1		
BY	CLASS	SUBCLASS
DRAFTSMAN		

DOT 4384360

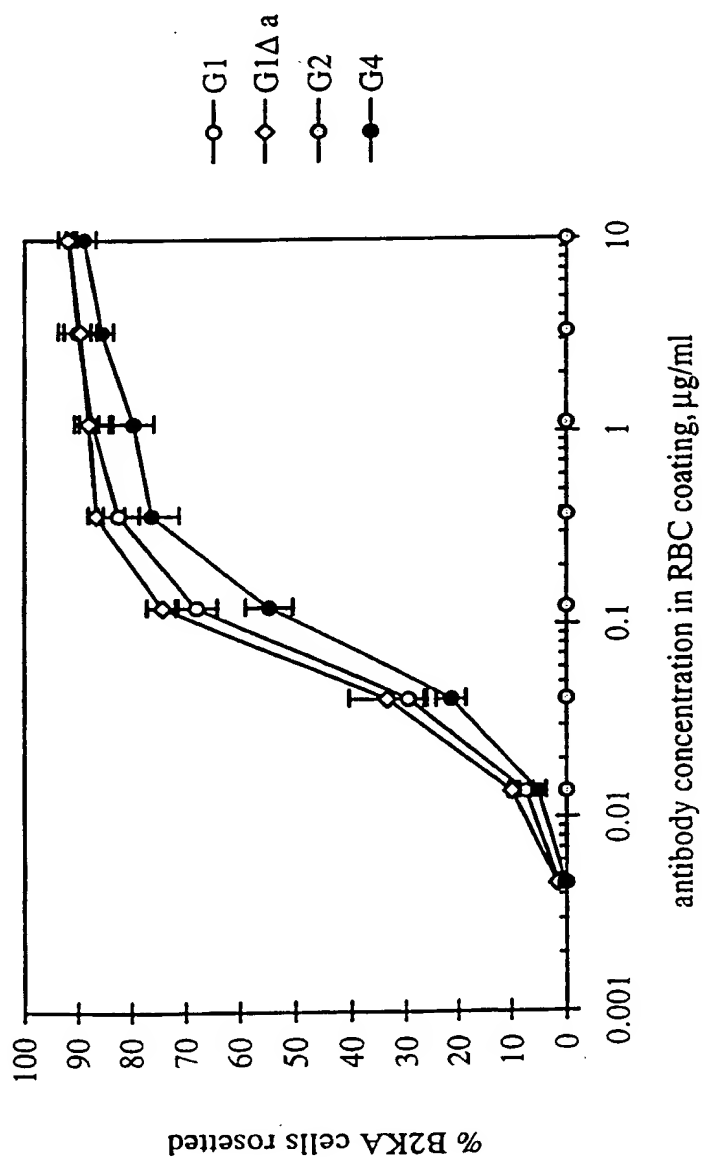
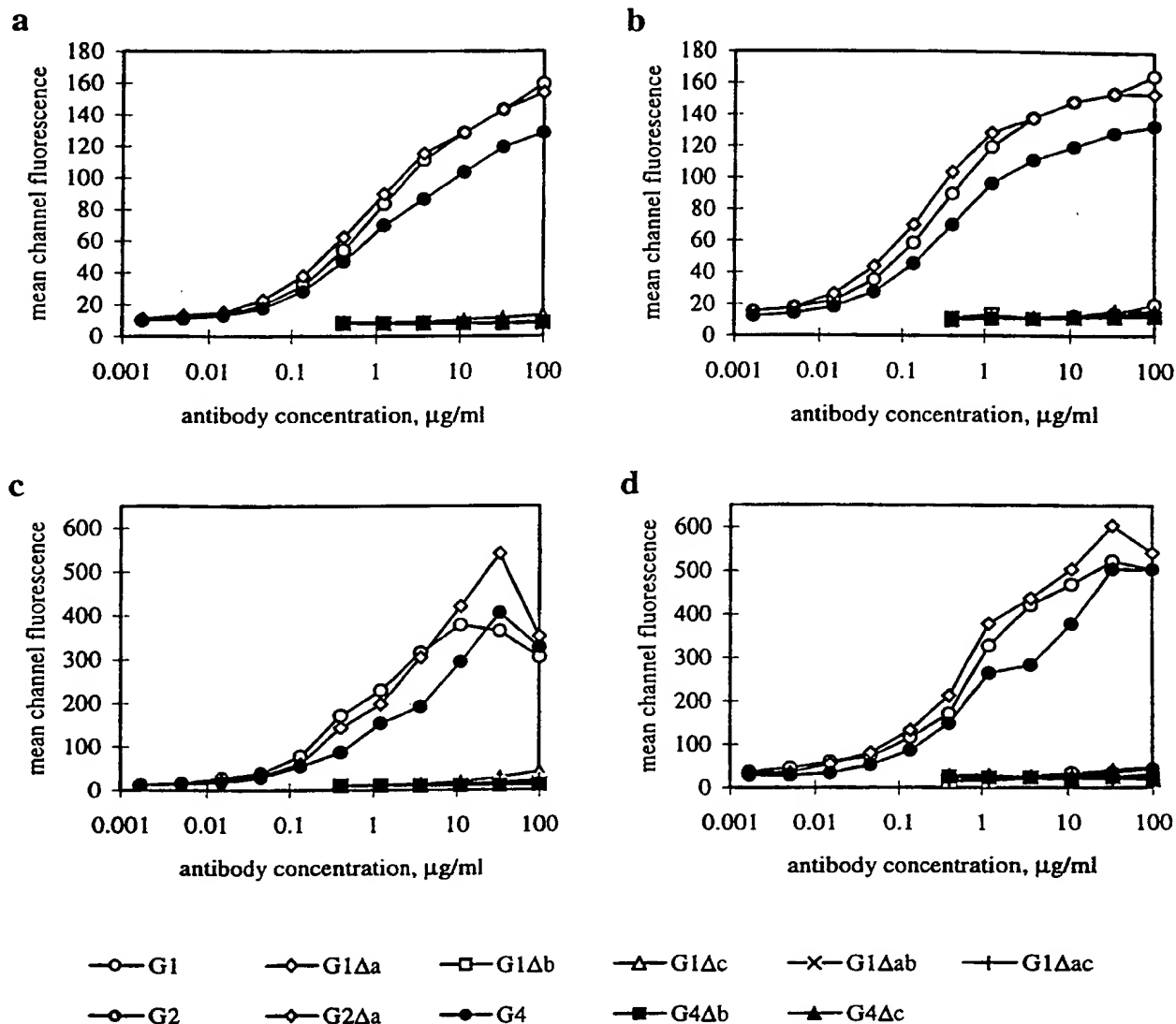


Figure 1

Figure 2



APPROVED	J.C. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

004017 00000000

Figure 3

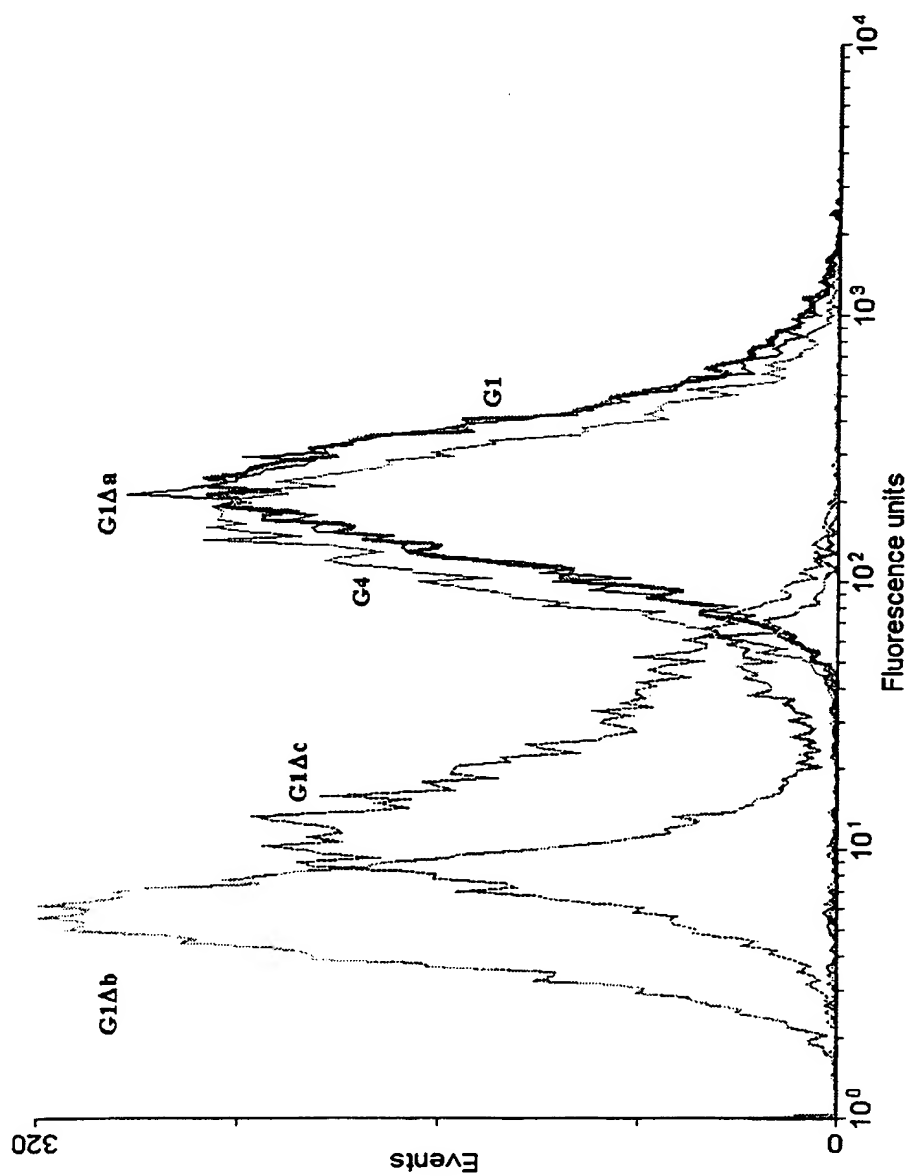


Figure 4

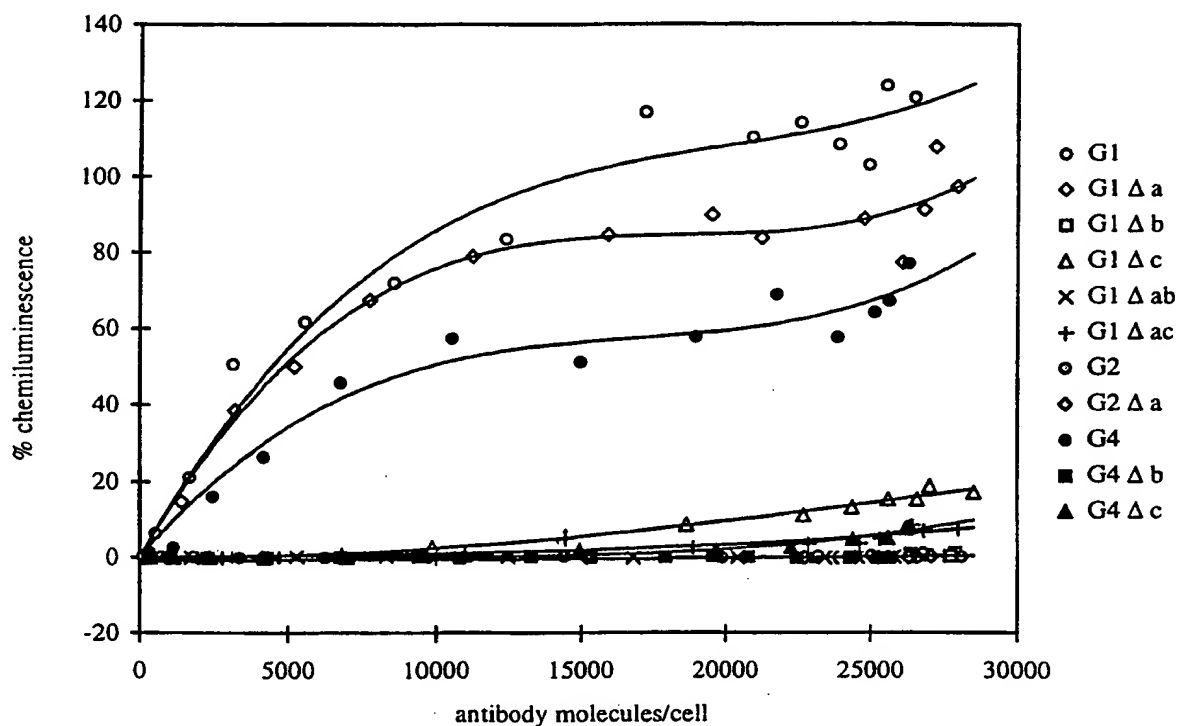


Figure 5

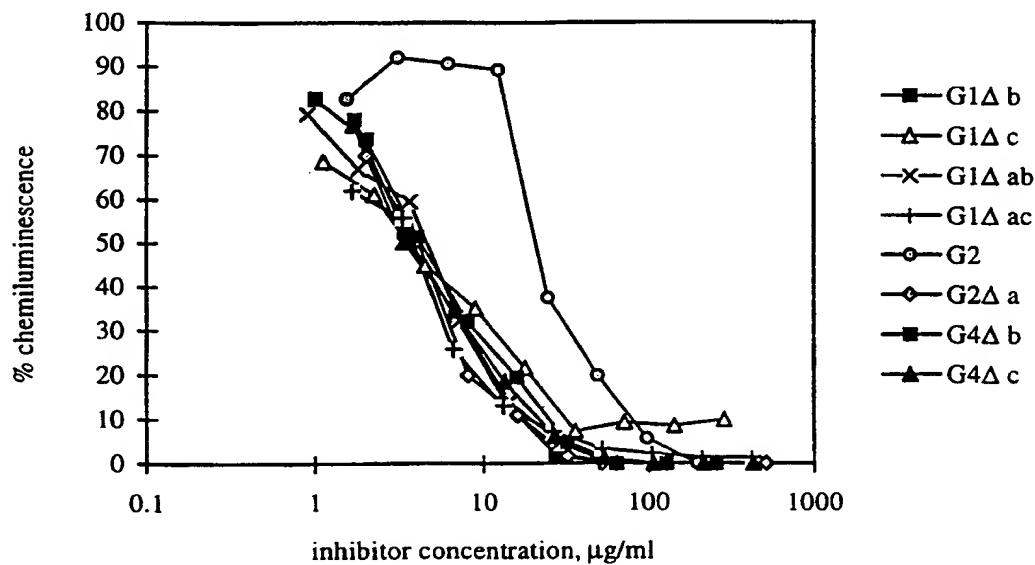


Figure 6

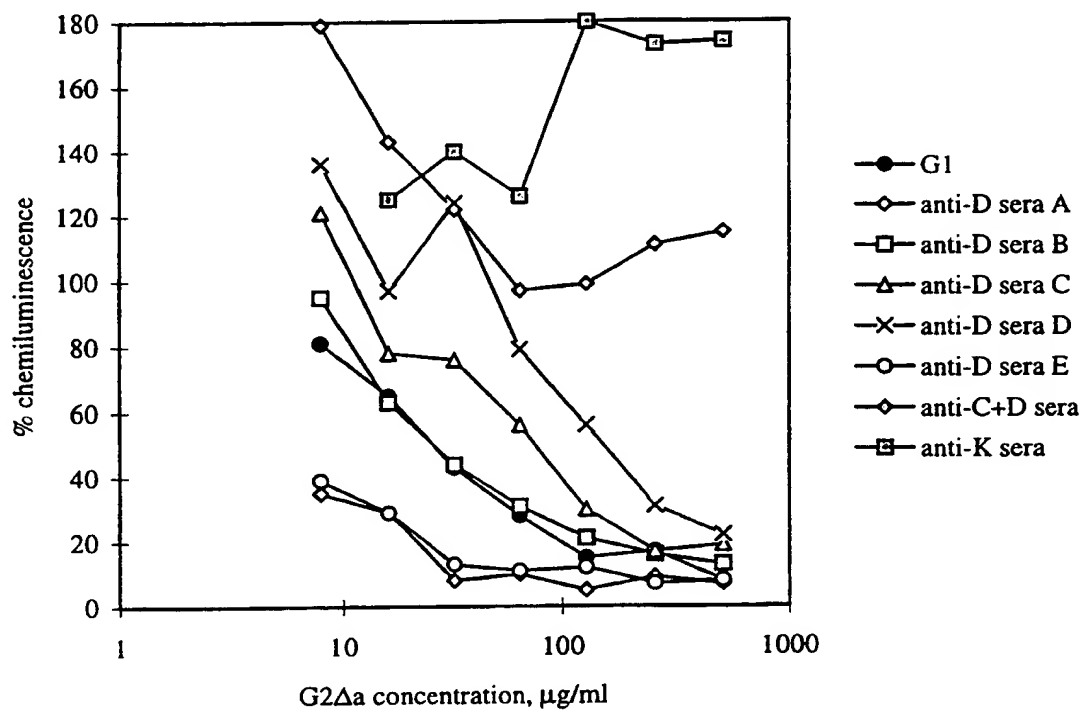


Figure 7

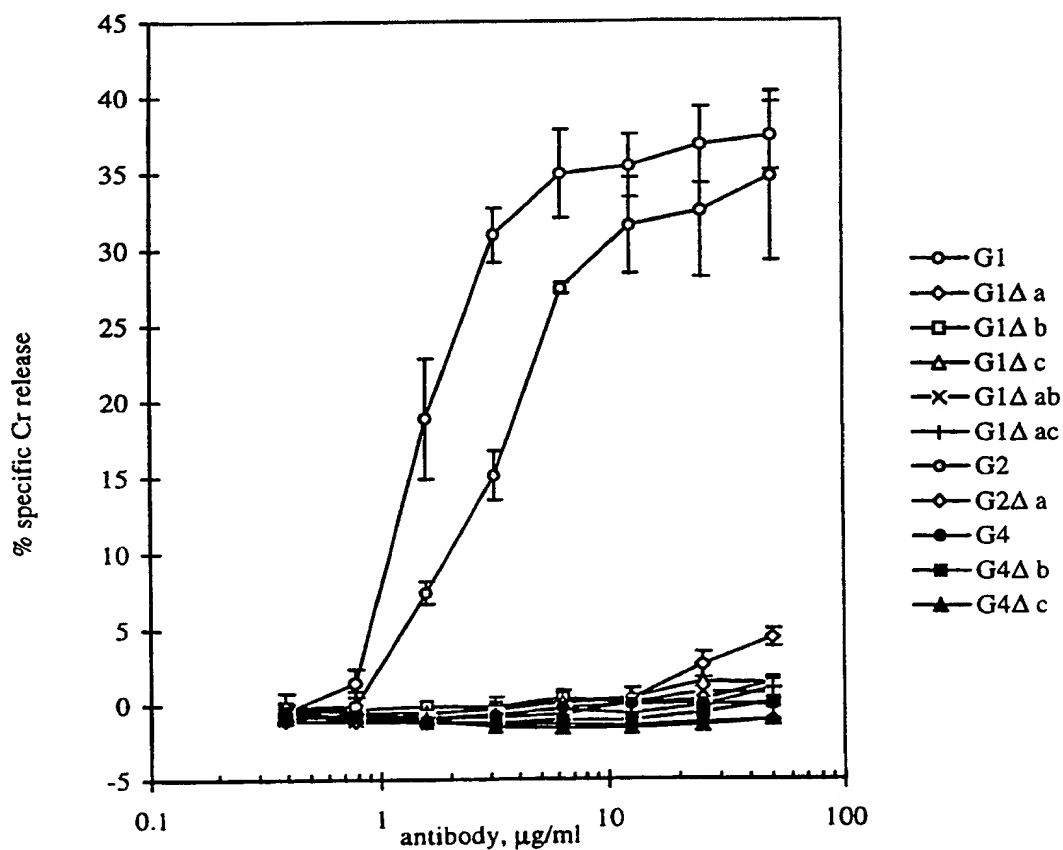


Figure 8

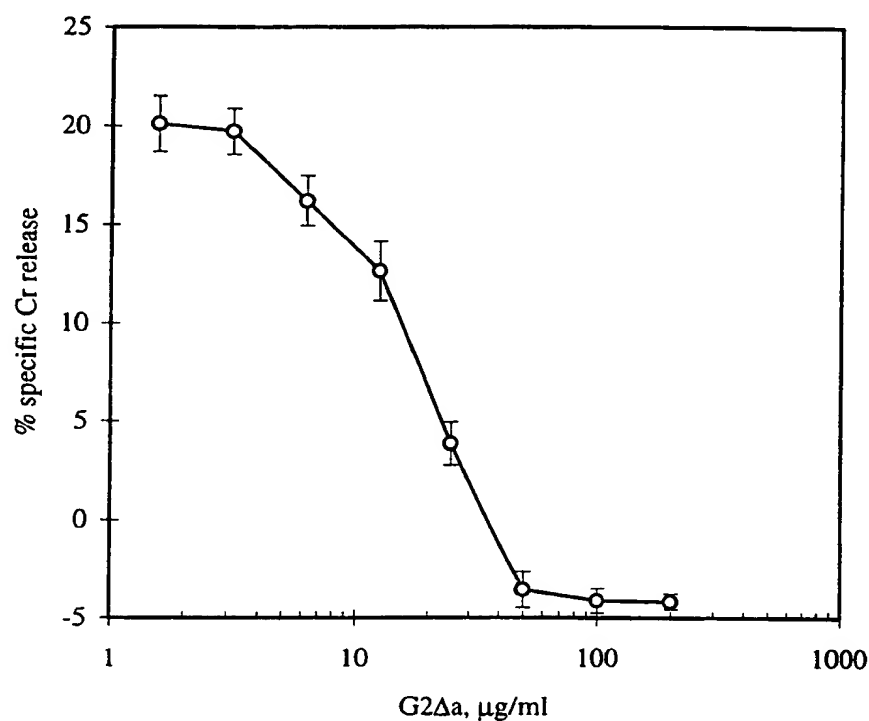


Figure 9

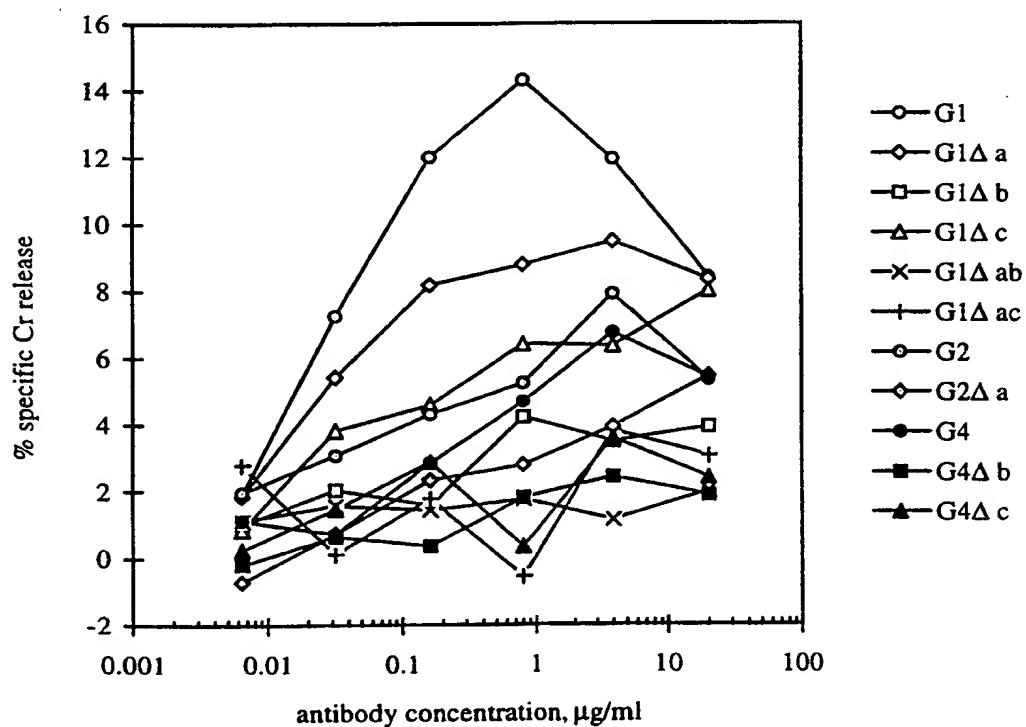


Figure 10a

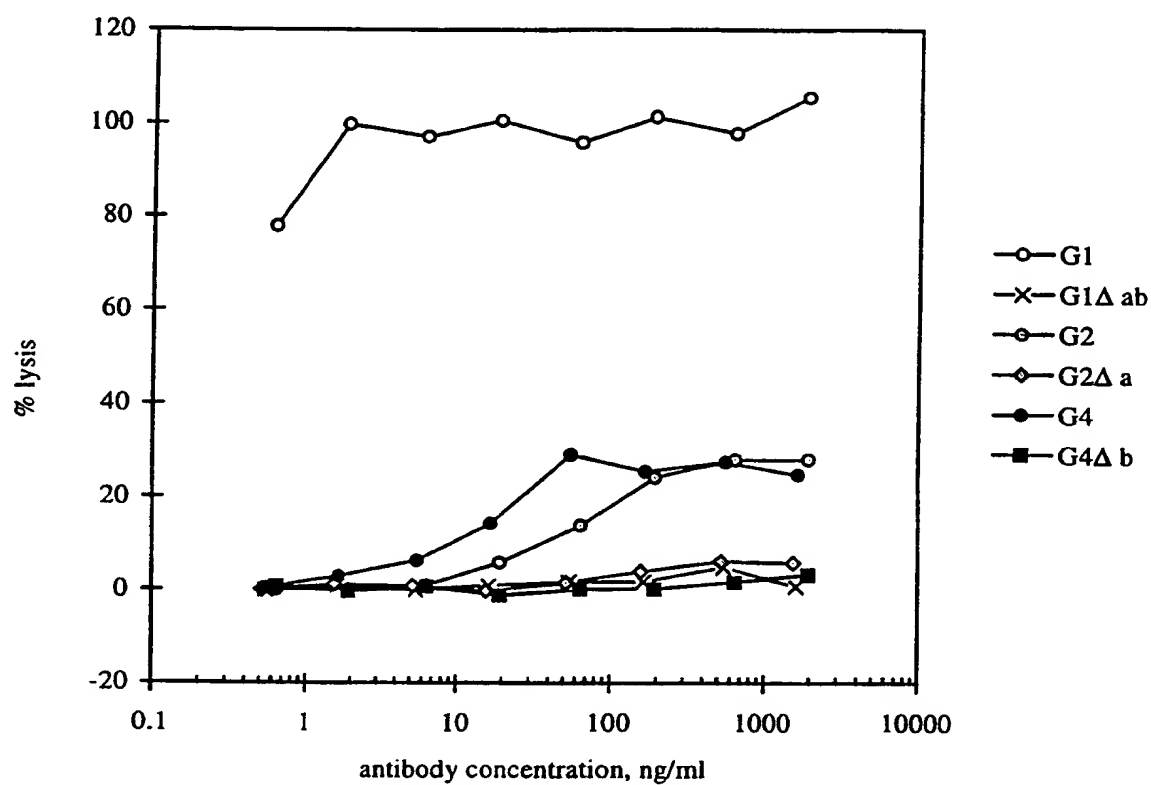


Figure 10b

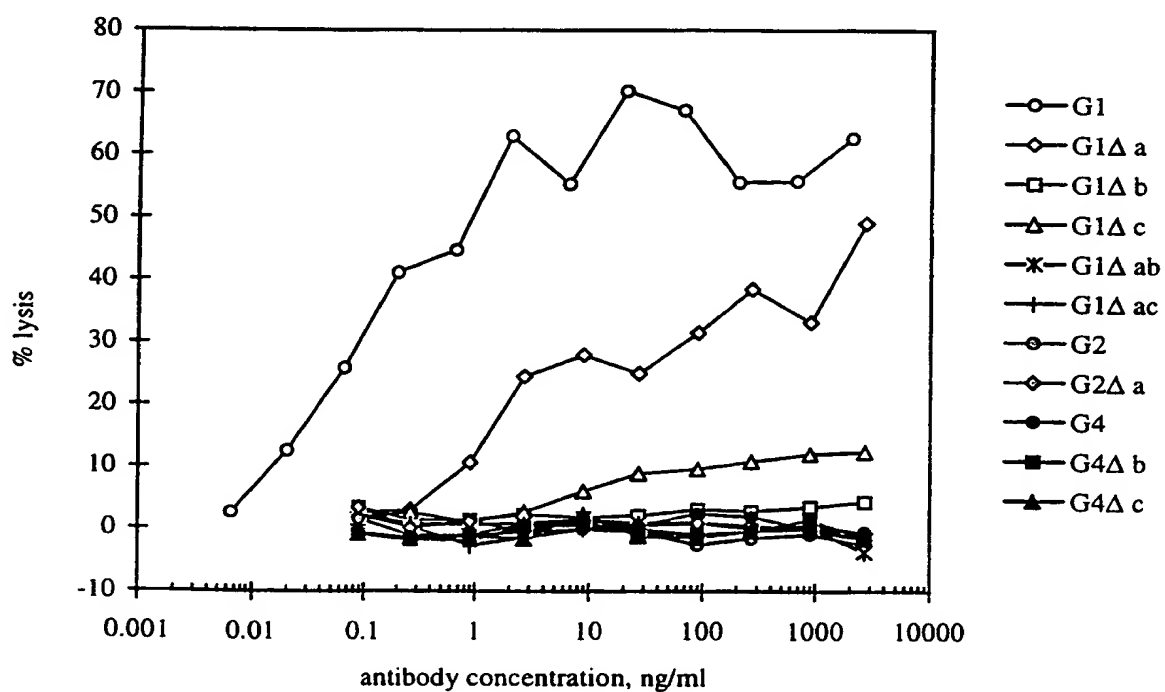


Figure 11a

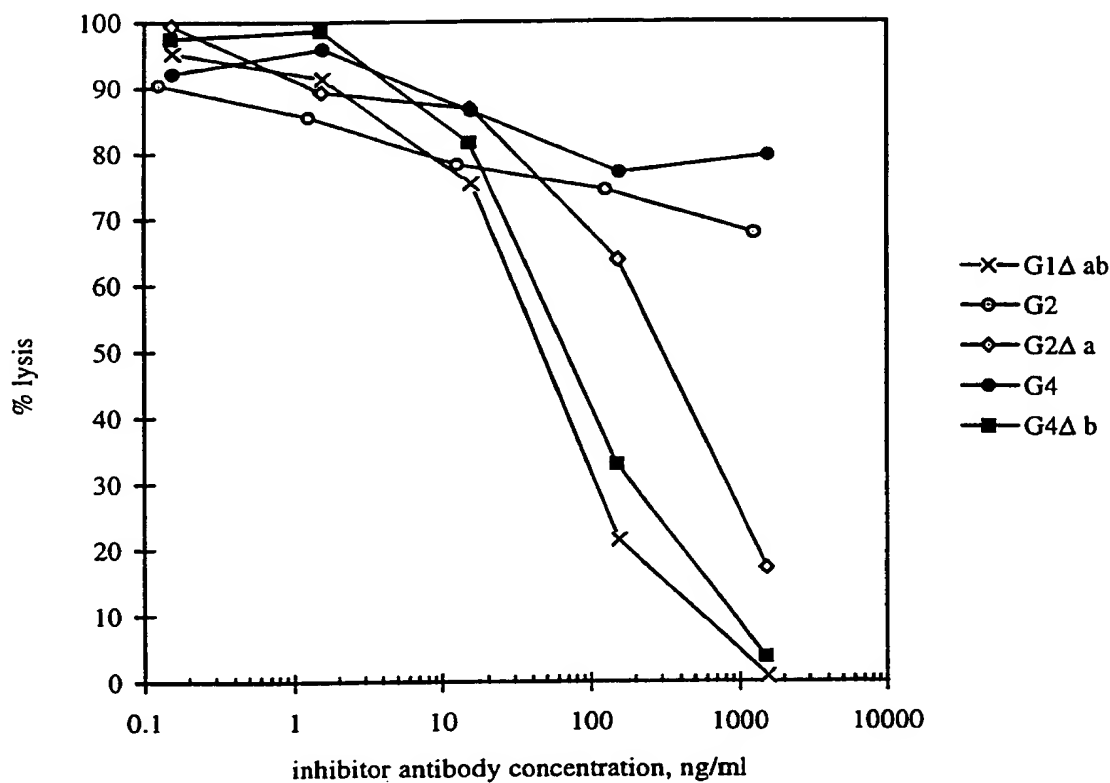


Figure 11b

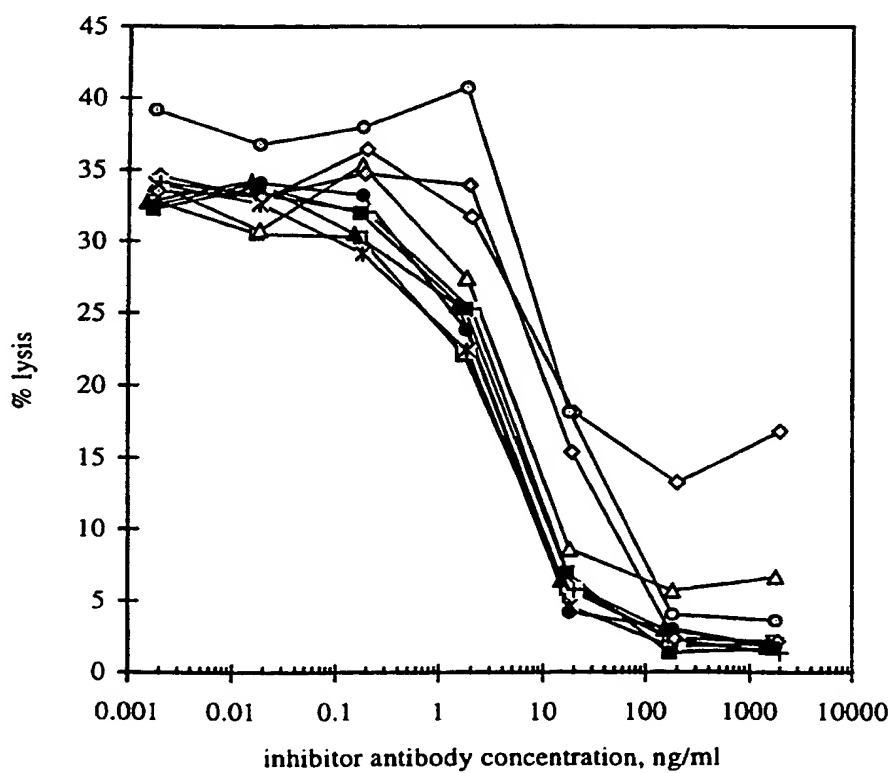




Figure 12

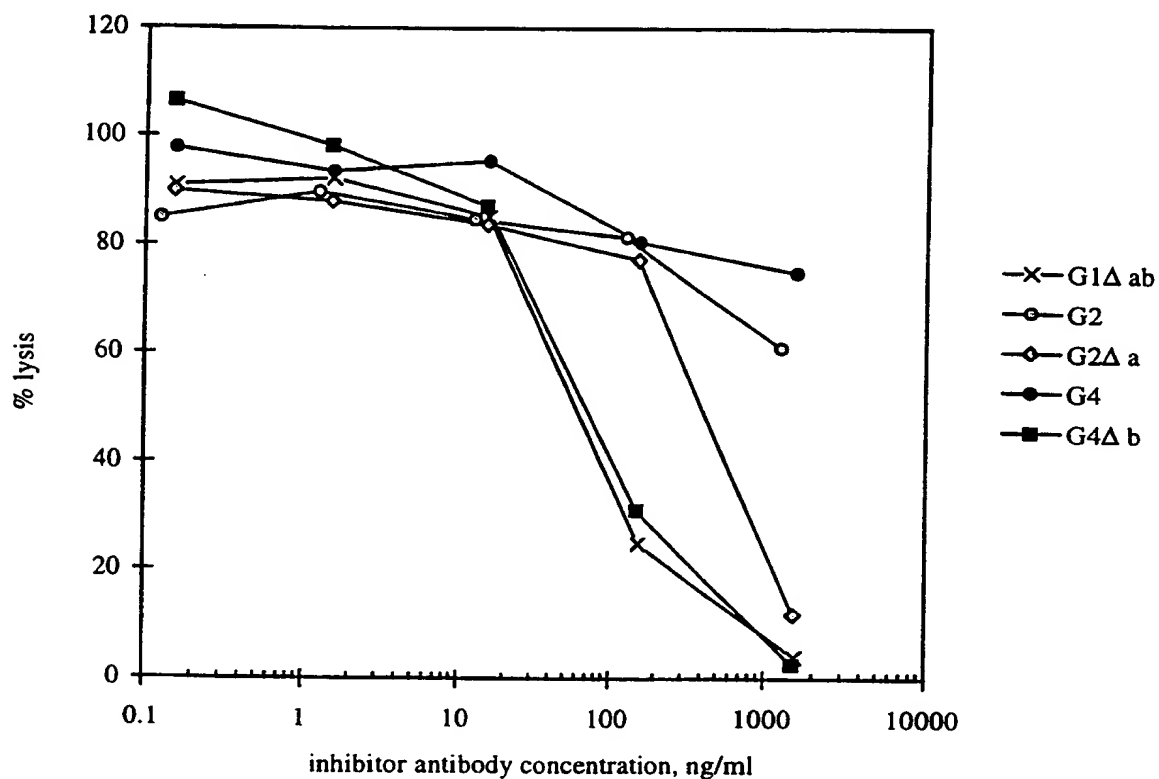


Figure 13q

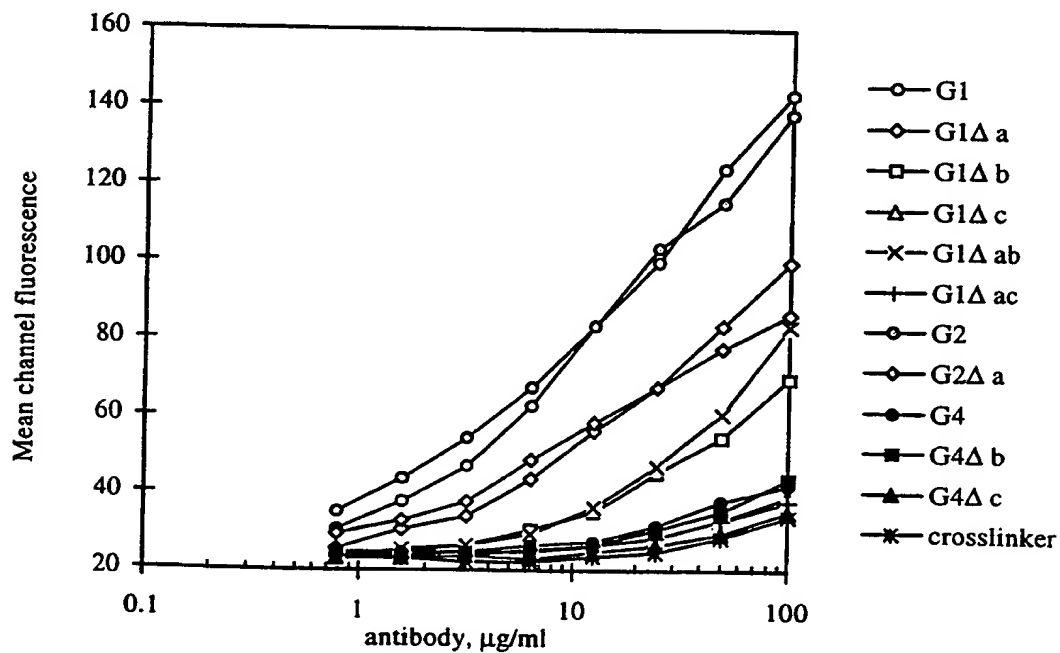


Figure 13b

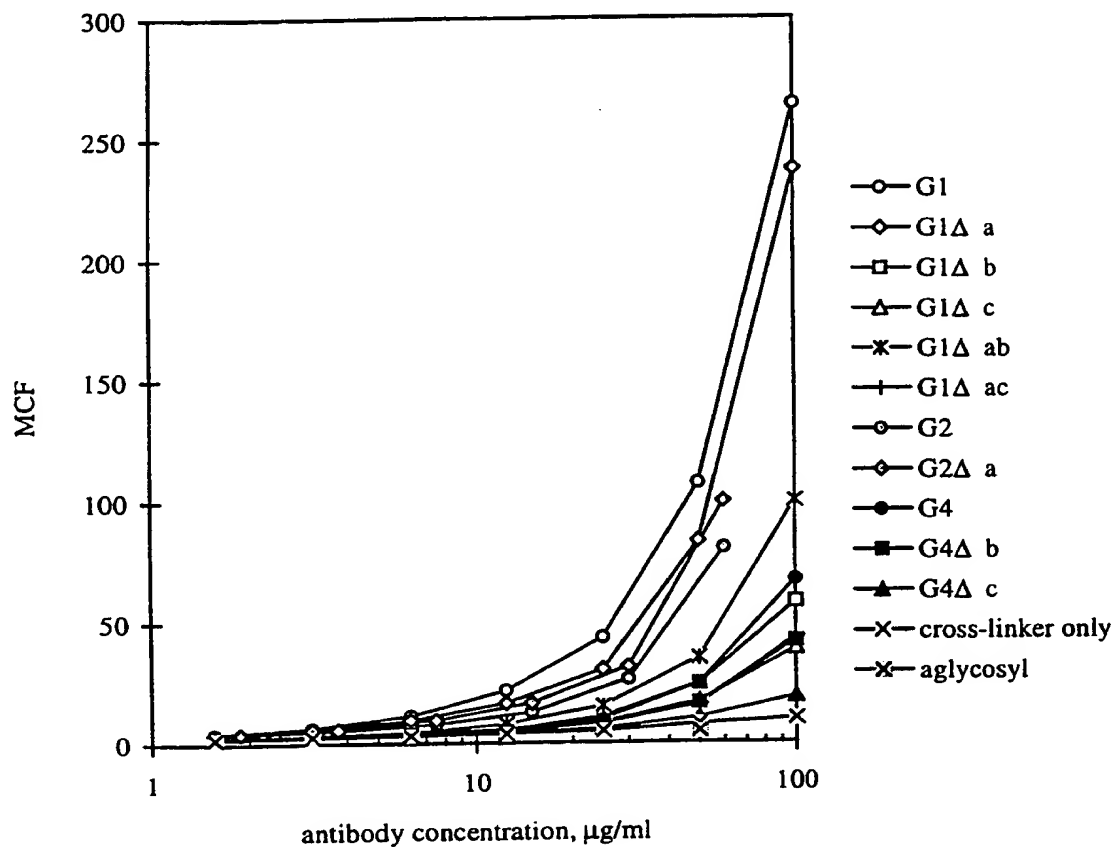


Figure 14a

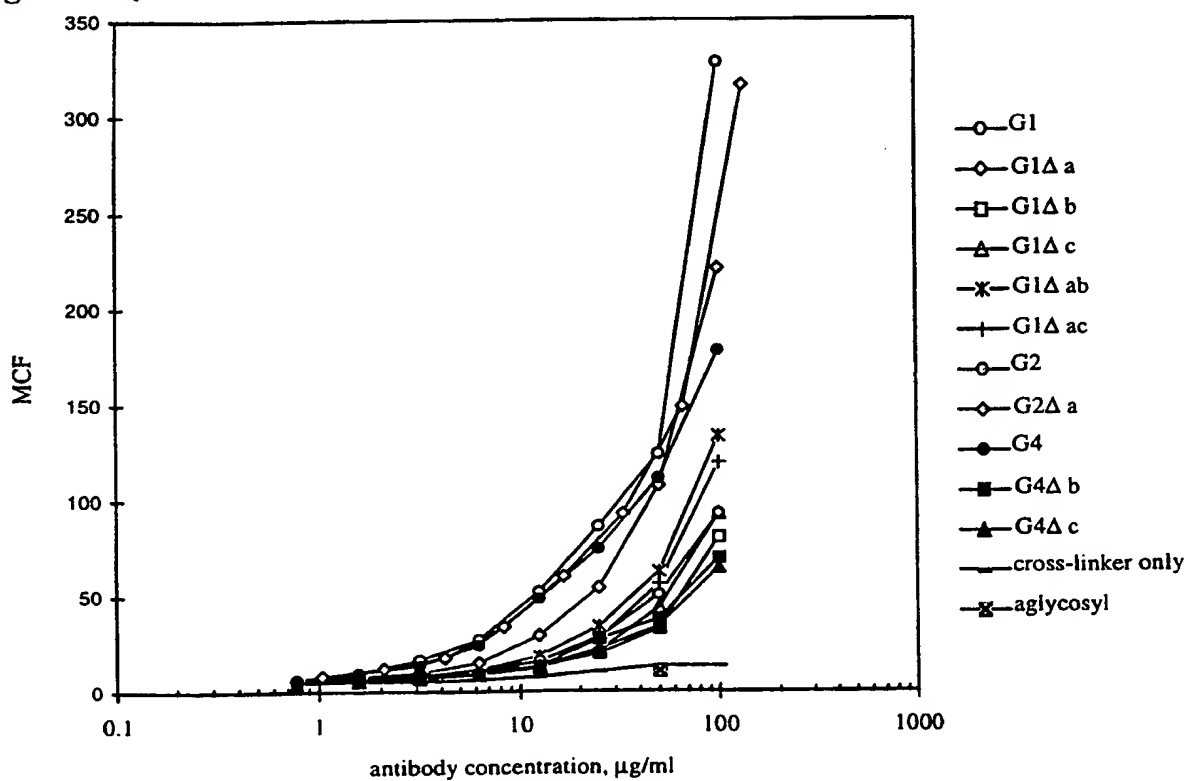


Figure 14b

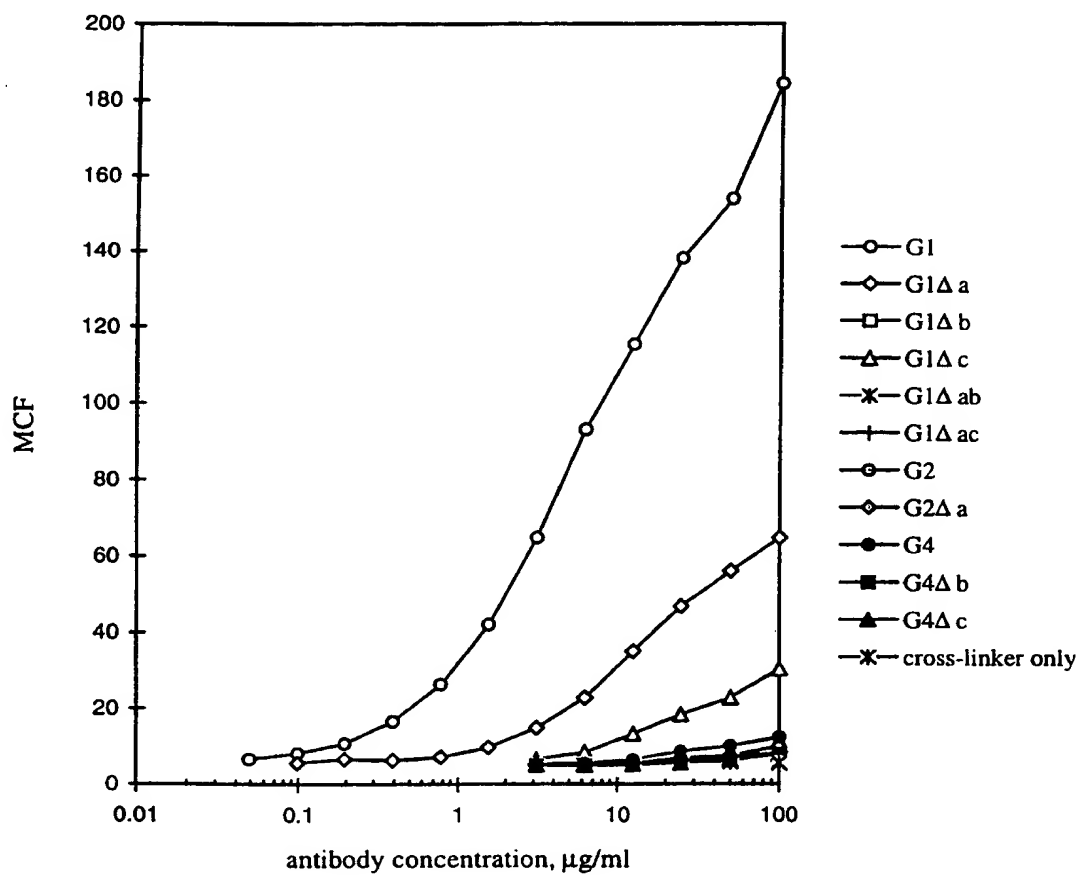


Figure 14c

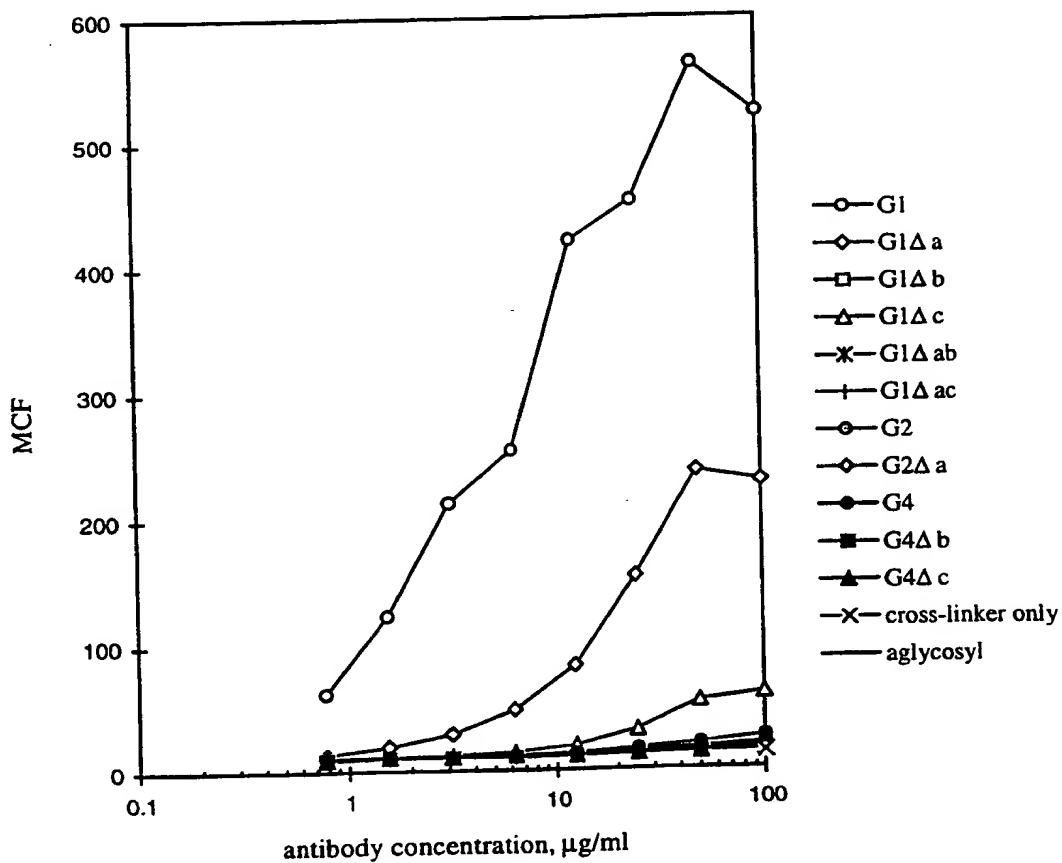


Figure 15

Table 1

A comparison of the mutations made to the wildtype G1, G2 and G4 antibodies

Antibody	233	234	235	236	327	330	331
G1	E	L	L	G	A	A	P
G1Δa	E	L	L	G	G	S	S
G1Δb	P	V	A	-	A	A	P
G1Δc	P	V	A	G	A	A	P
G1Δab	P	V	A	-	G	S	S
G1Δac	P	V	A	G	G	S	S
G2	P	V	A	-	G	A	P
G2Δa	P	V	A	-	G	S	S
G4	E	F	L	G	G	S	S
G4Δb	P	V	A	-	G	S	S
G4Δc	P	V	A	G	G	S	S

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Figure 16

Assay system	Series	G1	G1a	G1b	G1c	G1ab	G1ac	G2	G2a	G4	G4b	G4c
FcγRI: rosetting	F	+++	+++	-	-	-	-	-	-	++	-	-
FcγRI: fluorescent staining	C/F	+++	+++	-	-/+	-	-/+	-	-	++	-	-/+
FcγRIIa H/H: fluorescent staining	C/F	+++	++	+	-/+	+	-/+	+++	++	-/+	-/+	-
FcγRIIa R/R: fluorescent staining	F	+++	+++	+/-	+/-	+	+/-	++	++	+/-	+/-	-/+
FcγRIIb*: fluorescent staining	F	+++	+++	+	+	++	++	+	+++	+++	+	+
FcγRIIb NA1: rosetting	F	++	+	+/-	+/-	-/+	-/+	+/-				
FcγRIIb NA1: fluor. staining	F	+++	++	-	+	-	-	-	-	+/-	-	-
FcγRIIb NA2: fluor. staining	F	+++	++	-	+	-	-	-	-	+/-	-	-
FcγRI/II: chemiluminescence	F	+++	++	-	+/-	-	-/+	-	-	+	-	-/+
Complement lysis	C	+++	+/-	-/+	-/+	-/+	-/+	++	-	-	-	-
ADCC	C	+++	++	+/-	+	-	-/+	+	+/-	+	-	-/+
ADCC	F	+++	+++	+	++	-	-	+/-	-/+	+/-	-	-

Inhibition of G1 activity in assay	Series	G1	G1a	G1b	G1c	G1ab	G1ac	G2	G2a	G4	G4b	G4c
FcγRI: rosetting	F								+		+	
FcγRI/II: chemiluminescence	F			+++	++	+++	+++	+	+++		+++	+++
Complement lysis	C								+			
ADCC	F		-	++	+	++	++	-	+	-	++	++

Series CAMPATH-1 (C) or Fcγ-1 (F) antibodies tested  
 +++++, +++, ++ or + relative level of activity in assay  
 +/- low level of activity which is significantly above background  
 -/+ low level of activity which is slightly above background  
 - no activity above background  
 blank not tested

# Full C<sub>H</sub>2 Sequences Of the Parental and Mutated Antibodies

APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

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	233	234	235	236	252	253	254	296	310	318	327	330	331
G1	APRLGGPSVFLFP	APRLGGPSVFLFP	APRLGGPSVFLFP	APRLGGPSVFLFP	APRLGGPSVFLFP	APRLGGPSVFLFP	APRLGGPSVFLFP	APRLGGPSVFLFP	APRLGGPSVFLFP	APRLGGPSVFLFP	APRLGGPSVFLFP	APRLGGPSVFLFP	APRLGGPSVFLFP
G2	APRLGGPSVFLFP	APRLGGPSVFLFP	APRLGGPSVFLFP	APRLGGPSVFLFP	APRLGGPSVFLFP	APRLGGPSVFLFP	APRLGGPSVFLFP	APRLGGPSVFLFP	APRLGGPSVFLFP	APRLGGPSVFLFP	APRLGGPSVFLFP	APRLGGPSVFLFP	APRLGGPSVFLFP
G3	APRLGGPSVFLFP	APRLGGPSVFLFP	APRLGGPSVFLFP	APRLGGPSVFLFP	APRLGGPSVFLFP	APRLGGPSVFLFP	APRLGGPSVFLFP	APRLGGPSVFLFP	APRLGGPSVFLFP	APRLGGPSVFLFP	APRLGGPSVFLFP	APRLGGPSVFLFP	APRLGGPSVFLFP
G4	APRLGGPSVFLFP	APRLGGPSVFLFP	APRLGGPSVFLFP	APRLGGPSVFLFP	APRLGGPSVFLFP	APRLGGPSVFLFP	APRLGGPSVFLFP	APRLGGPSVFLFP	APRLGGPSVFLFP	APRLGGPSVFLFP	APRLGGPSVFLFP	APRLGGPSVFLFP	APRLGGPSVFLFP
G1Aa	APRLGGPSVFLFP	APRLGGPSVFLFP	APRLGGPSVFLFP	APRLGGPSVFLFP	APRLGGPSVFLFP	APRLGGPSVFLFP	APRLGGPSVFLFP	APRLGGPSVFLFP	APRLGGPSVFLFP	APRLGGPSVFLFP	APRLGGPSVFLFP	APRLGGPSVFLFP	APRLGGPSVFLFP
G1Ab	APRLGGPSVFLFP	APRLGGPSVFLFP	APRLGGPSVFLFP	APRLGGPSVFLFP	APRLGGPSVFLFP	APRLGGPSVFLFP	APRLGGPSVFLFP	APRLGGPSVFLFP	APRLGGPSVFLFP	APRLGGPSVFLFP	APRLGGPSVFLFP	APRLGGPSVFLFP	APRLGGPSVFLFP
G1Ac	APRLGGPSVFLFP	APRLGGPSVFLFP	APRLGGPSVFLFP	APRLGGPSVFLFP	APRLGGPSVFLFP	APRLGGPSVFLFP	APRLGGPSVFLFP	APRLGGPSVFLFP	APRLGGPSVFLFP	APRLGGPSVFLFP	APRLGGPSVFLFP	APRLGGPSVFLFP	APRLGGPSVFLFP
G1Aab	APRLGGPSVFLFP	APRLGGPSVFLFP	APRLGGPSVFLFP	APRLGGPSVFLFP	APRLGGPSVFLFP	APRLGGPSVFLFP	APRLGGPSVFLFP	APRLGGPSVFLFP	APRLGGPSVFLFP	APRLGGPSVFLFP	APRLGGPSVFLFP	APRLGGPSVFLFP	APRLGGPSVFLFP
G1Aac	APRLGGPSVFLFP	APRLGGPSVFLFP	APRLGGPSVFLFP	APRLGGPSVFLFP	APRLGGPSVFLFP	APRLGGPSVFLFP	APRLGGPSVFLFP	APRLGGPSVFLFP	APRLGGPSVFLFP	APRLGGPSVFLFP	APRLGGPSVFLFP	APRLGGPSVFLFP	APRLGGPSVFLFP
Seq 10 1	APRLGGPSVFLFP	APRLGGPSVFLFP	APRLGGPSVFLFP	APRLGGPSVFLFP	APRLGGPSVFLFP	APRLGGPSVFLFP	APRLGGPSVFLFP	APRLGGPSVFLFP	APRLGGPSVFLFP	APRLGGPSVFLFP	APRLGGPSVFLFP	APRLGGPSVFLFP	APRLGGPSVFLFP
Seq 10 2	APRLGGPSVFLFP	APRLGGPSVFLFP	APRLGGPSVFLFP	APRLGGPSVFLFP	APRLGGPSVFLFP	APRLGGPSVFLFP	APRLGGPSVFLFP	APRLGGPSVFLFP	APRLGGPSVFLFP	APRLGGPSVFLFP	APRLGGPSVFLFP	APRLGGPSVFLFP	APRLGGPSVFLFP
G2Aa	APRLGGPSVFLFP	APRLGGPSVFLFP	APRLGGPSVFLFP	APRLGGPSVFLFP	APRLGGPSVFLFP	APRLGGPSVFLFP	APRLGGPSVFLFP	APRLGGPSVFLFP	APRLGGPSVFLFP	APRLGGPSVFLFP	APRLGGPSVFLFP	APRLGGPSVFLFP	APRLGGPSVFLFP
G2Ab	APRLGGPSVFLFP	APRLGGPSVFLFP	APRLGGPSVFLFP	APRLGGPSVFLFP	APRLGGPSVFLFP	APRLGGPSVFLFP	APRLGGPSVFLFP	APRLGGPSVFLFP	APRLGGPSVFLFP	APRLGGPSVFLFP	APRLGGPSVFLFP	APRLGGPSVFLFP	APRLGGPSVFLFP
G2Ac	APRLGGPSVFLFP	APRLGGPSVFLFP	APRLGGPSVFLFP	APRLGGPSVFLFP	APRLGGPSVFLFP	APRLGGPSVFLFP	APRLGGPSVFLFP	APRLGGPSVFLFP	APRLGGPSVFLFP	APRLGGPSVFLFP	APRLGGPSVFLFP	APRLGGPSVFLFP	APRLGGPSVFLFP

Figure 17